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IV

**FALL FIELD WORK IN PLUMAS AND YUBA  
COUNTIES, CALIFORNIA, IN 1922**

BY

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The autumn field work of the department for several years past having been carried on in the mountain ranges between the Sacramento Valley and the coast, principally for the purpose of observing the fall migration of birds, especially of fox sparrows, it was decided to examine the foothills on the northeastern side of that valley in the fall of 1922, with a similar object in view.

With no data at hand as to favorable localities for such work, and utter failure being the result when it came to questioning individuals in this regard, it was a matter of pure guesswork where to make a start. As the town of Quincy, Plumas County (California), at an elevation of 3180 feet, seemed to be well situated, judging by the map, and as there was living there a man who was known to be interested in natural history, although in an untrained way, it was decided to make this place the first objective, and it was reached by way of Oroville on September 8.

It was hoped that a good spot might be found on the road to Quincy, in the 64 miles over the mountains from Oroville, but nothing in the way of an attractive locality was found at

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a sufficiently low altitude for the work. At altitudes of from 5000 to 7000 feet on the mountain range between Oroville and Quincy there was a good deal of brush land, varied by timber and open places, that looked all right, but no bird life was noted as we traveled slowly along. It was hardly to be expected that any large number of birds would choose such altitudes for lines of migration at this time of year when they would be subject to the very extremes of temperature and succession of storms they were traveling southward to escape. However, in early autumn this is not a fixed rule, for birds often remain at comparatively high altitudes, when attracted there by a plentiful food supply, until actually driven out by adverse weather conditions.

Quincy lies in quite a level little valley, in which there are probably at least 2000 acres of good to fair meadow land, with a stream or two running through it. Out in this open land there were a few of the species of birds that are seen in the fall almost anywhere in the Transition Zone in California, the Western Meadowlark (*Sturnella neglecta*), California Brewer's Blackbird (*Euphagus cyanocephalus minusculus* Grinnell), Audubon's Warbler (*Dendroica auduboni auduboni*), and Western Bluebird (*Sialia mexicana occidentalis*), with a few goldfinches and a common hawk or so, being the principal species noted. Rather strange to say, there were no marsh sparrows (*Passerculus*) seen anywhere in these open fields.

Southeast of Quincy there is a good deal of fairly level land that was covered formerly by coniferous forest, but which has not only been denuded of trees, but has been devastated by numerous fires. In this territory there were but few birds, and no flycatchers, of which not a single representative was noted during our stay of nine days.

On the mountains about Quincy there is some rough, rocky country, with forest running up the cañons, yet there was but little "buck brush", or attractive looking cover for fox sparrows within reach. Running through the center of the meadow west of the town was a sort of slough, probably an old bed of the stream which flows through the valley; and along this slough was a heavy growth of brushy willows, forming a fine cover for sparrows. In the thickest of this

willow growth there were a great many song sparrows, and one or two glimpses were obtained of what appeared to be fox sparrows, but there was such a thick growth of grass and weeds from four to six feet high, with about a foot of water at the base, that it was absolutely impossible to carry on satisfactory observations there. As to collecting specimens for identification, there was no use trying, for none could be retrieved from this mass of dead and living herbage.

By the kind permission of the owner of the land, camp was made beside a spring of exceptionally pure water at the northern edge of a grove of small firs about half a mile west of Quincy.

During our stay here the afternoon temperatures were quite high, when the shade of the trees was much appreciated; but the early mornings were very cold, with frost in the meadow opposite and a cold draft flowing down on the camp from the cañon behind it.

It seemed as if the spring, which flowed only for some 50 yards, might frequently be visited by birds, but such was not the case. Birds were most noticeably scarce in the vicinity, and also in an attractive looking cañon near at hand, which had a stream of water flowing down it and brush and forest on its sides. Possibly the fact that this narrow cañon had a northern exposure made it too cold to be a favorite locality. There was some good cover here for birds,—consisting of several different kinds of brush, including Ceanothus, oaks, alders, firs, etc., in profusion,—yet there were practically no birds. A few kinglets, a chickadee or two, a couple of Sacramento Towhees (*Pipilo maculatus falcinellus*), and an American Dipper (*Cinclus mexicanus unicolor*) were about all that were met with in a half mile walk up this cañon to the end of the trail, beyond which the cañon was almost impassable on account of the thick brush and the rough character of the surface.

Mr. W. B. Smith, my assistant on this trip, who had had but little experience with birds it should be said, was sent up on the mountain above camp, with instructions to bring in whatever he might come across, but he reported that there was almost no bird life there.

The country was explored in our car for some miles along each road that led out of the town in an endeavor to find some favorable looking spot for observation, but nothing was located that appeared to be more promising than where we were.

Traps for small rodents were set along the edge of the woods and in the meadow. In the woods very little success was met with except in one instance, when Smith was instructed to set out some traps along an old brush fence,—this being, incidentally, the first trapping of the kind that he had ever attempted,—and the next morning had a couple of white-footed mice, a shrew, and a Mazama Red-backed Mouse (*Evotomys mazama* Merriam) in his traps. This last mentioned specimen is a new record for the interior of California, south of Mt. Shasta. The skin and skull of this specimen were sent to Washington, and finally passed upon by Mr. A. Brazier Howell, who is at present working on the western microtines. He has the following to say regarding it: "The coloration of that *Evotomys* can be matched in both *obscurus* and *mazama* series. . . . The Quincy specimen is fully as dark as average *obscurus*, but with even less reddish dorsally. However, it has the large feet and bullæ usual in *mazama*, and had better be called that at least until more are obtained. If it has escaped in that region for so long, it may yet be obtained in the more southern Sierras." Mr. Howell is confident that these two forms are only subspecifically distinct, as there is so much overlapping of characters.

Dr. Walter K. Fisher informs me that he took a red-backed mouse at Quincy nearly 20 years ago, but apparently this fact has not been recorded in any publication. Curiously enough, Smith took nothing else in his traps after having had this one piece of good fortune.

In the meadow, traps were first set along the bank of the slough mentioned above, but the results were far from encouraging although the settings were made in long grass where small runways were easily discernible. In one part of the meadow, where the ground was quite damp, the grass had but recently been mowed very short, and here were many holes of meadow mice with distinct runways between. Traps carefully set in these runways brought good results. Fair results were also obtained with some traps set near by in a

still damper place, where there was considerable old grass yet remaining. This spot, however, was the habitat of a large carrion beetle (*Necrophorus hecate* Bland), which appeared after sunrise and quickly destroyed any of the meadow mice that were still in the traps. Unlike most of the other genera of small rodents, these meadow mice move about to some extent in the daytime, and traps set for them have to be looked after accordingly. In this spot the traps were visited before sunrise and again a couple of hours later, but even so, several specimens caught were dismembered and either eaten on the spot or actually carried away by these beetles. The examples of *Microtus* secured seem to be of the race described by Dr. Joseph Grinnell as the Yosemite Meadow Mouse (*Microtus montanus yosemite*).<sup>1</sup>

It seemed rather singular that not a single brush (*Silvilagus*) nor jack rabbit (*Lepus*) was seen in our wanderings in the neighborhood of Quincy. The latter are probably too much cut off by forest from the larger areas of the open country that is their natural habitat, but there seemed to be no good reason for the absence of brush rabbits, as all this valley is in the Transition Zone. Possibly the brush rabbit, cut off from here by the mountain ranges, has never worked up the cañons from its known habitat in the Sacramento Valley.

One small family of Mountain Quail (*Oreortyx picta plumifera*) was found by the road about a mile southeast of Quincy, but no others were seen or heard anywhere in the vicinity.

This valley proved to be so barren of bird life that camp was struck on September 16 and the road to Blairsden was taken with the idea of looking for a better locality. Nothing attractive being found, we went over the mountains, by way of Mohawk, Gold Lake, and Downieville to Goodyear's Bar, spending the night at the last mentioned place.

On the way over a sharp lookout was maintained for a suitable spot in which to locate. A spring was found near the road, not far from the top of the range just east of Gold Lake, but the altitude was such that it was deemed inadvisable to camp there. Another very promising looking piece

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<sup>1</sup>Proc. Biol. Soc. Wash., 27, pp. 207-208.

of country was passed through at the foot of the Sierra Buttes, at an elevation of probably about 4000 feet, but no spot suitable for a camp ground was found along this stretch of road. Farther down toward Downieville, the buck brush, manzanita, etc., gave way to a tree-covered country, not favorable for our purpose.

The morning following our arrival at Goodyear's Bar, a discussion regarding the character of the country around about was held with the forest ranger, and, from his description, the neighborhood of Challenge, Yuba County, seemed to hold forth the greatest promise of success.

Disagreeable as it was to do so, we had to leave the splendid mountain road on which Downieville, the county seat of Yuba County, is situated, and take a rough, steep, and narrow country cross-road to reach our destination. We arrived at Challenge early in the afternoon, and, after a discussion concerning the locality with some of its residents, we finally established a camp at the edge of the woods at the east end of what was known in the placer-mining days as "New York Flat", about three miles west of the Challenge postoffice.

This pleasant camp was situated close to a rather ancient ranch house (occupied by a Mr. Wetmore, to whom we were indebted for many kindnesses and courtesies), in a region appearing to be one of much promise. Round about were meadow lands, brushy tracts, and patches of forest, with some abandoned orchards here and there; but we soon found that it was a land of promise only, for, as at Quincy, there was a paucity of both bird and mammal life. The season had been unfavorable in some ways, causing a failure of the acorn crop, and although there were many dead trees with storage holes made by the California Woodpecker, these holes contained no acorns.

After searching the country in several directions for better ground, it seemed advisable to move a little lower down to a place called Rackerby, a relic of the old mining days, about six miles nearer Marysville on the La Porte road. At one time a station of some importance, Rackerby is but a remnant of what it used to be, consisting now of only a small cluster of houses and a postoffice. There are a number of old orchards and vineyards in the vicinity, and just across South Honcut



Creek, which, at this point, forms the boundary line between Yuba and Butte counties, a ditch that was formerly used in mining operations winds its way along the ridge westerly from Rackerby. In some small holdings on its banks the water from this ditch is used for irrigation purposes, but only to a very limited extent owing to the hilly character of the country.

There is some good brush around here, and this was the first time in over 100 miles of search that we came across a spot at a low elevation which seemed one in which to expect to find fox sparrows. In this locality there are some thick patches of manzanita and *Ceanothus* which appear to be connected with like association on a series of hillsides and cañons to the north and south. This more or less brushy country is only a few miles wide, with an elevation of probably about 1500 feet above sea level, and extends from the forest country on the east to the more open, oak-covered country on the west. It bore the appearance of being an extremely likely line of migration for fox sparrows. In fact, this stretch between Challenge and Rackerby seems to be the only logical route for this genus to take along these foothills between the Sacramento Valley and the higher elevations of from 4000 to 7000 feet.

At the time of our arrival at Rackerby, September 21, the weather was very warm and dry and there was no sign of frost, while at Challenge, 600 or 800 feet higher, the early morning temperatures were below freezing point. Near Rackerby were a number of beautiful, large fig trees, bearing their last crop of fruit for the season. This crop the owners were busily gathering as it fell to the ground, and drying. Besides these fig trees there were several old orchards and vineyards here, mostly still bearing fruit, and wild grape vines grew along the watercourses.

It seemed like an ideal place in which to find many species of birds, but here again their number was small. In fact it was remarkably small, when the profusion of food in the vicinity was taken into consideration. Possibly there was less insect life present than one might have imagined, but it was astonishing to find no juncos, tanagers, warblers, chickadees, nuthatches, kinglets, thrushes, or bluebirds at this place, which seemed to be in an association so eminently fitted for these

species at this time of year. Woods, brush, open lands, weeds, scattered trees, orchards, vineyards, brooks—what more might birds want? One bird, however, was not only common, but sufficiently so to be a nuisance,—so much of a nuisance that the owners of fruit trees had been encouraging the boys in the neighborhood to shoot all of this species that they could, with the result that, while still comparatively numerous, these birds had grown very wise and shy. This pest was the Long-tailed Jay (*Aphelocoma californica immanis* Grinnell), which was doing all it could to prevent the market from being overloaded with Rackerby fruit.

The first thing we did at this place was to endeavor to locate some springs in the brush where fox sparrows might come to drink. One was found at the side of a road leading to a mine in the vicinity, and it was visited early in the morning of September 22, with some success. Several fox sparrows came to the spring, or were seen in the brush near it, and three of them were secured. The Pallid Wren-tit (*Chamæa fasciata hensharvi*) was very numerous about this spring and so tame that individuals kept coming within a few feet of the observer, scolding, chattering, and fussing around in their customary “busy-body” way to such an extent as to make it very difficult to keep track of the fox sparrows’ movements, as any motion of twig, leaf, or other object has to be noted and analyzed during the period of observation.

We visited this spring again early the next morning. Three or four fox sparrows had been noted already, and a couple of them secured, when two men came along with picks and shovels and proceeded to drain the spring into a pipe in order to use the water at a distance. While a little of the spring was still available to the birds after this operation was completed, no water dribbled across the road into the brush below, and as it was there in the rather deep bed of the rivulet that the birds preferred to come to drink, the spring was ruined for our purposes. It seemed as if the spring itself, dug out and boarded over as it was, but not screened by bushes, had lost its attraction for the birds, as almost none visited it thereafter, although there were some trees and fairly good cover only a few yards distant.



About half a mile away, in a hollow below a sharp bend of the county road, another spring was discovered, and it was visited in the early morning of September 24. Only a few moments after our reaching it, however, the same miners who had spoiled our other spring for us, came along and commenced to cut for fire wood the trees directly protecting this one, and frightened any prospective bird visitors away from it.

After this episode, a couple of days were spent in investigating the possibilities of the old mining ditch previously mentioned, and the brushy patches along it. There were tall weeds in places on its banks, tangles of wild grape vines, wild lilac (*Ceanothus*), and some quite thick patches of brush here and there not far away, but there were no birds to speak of, not even song sparrows in the damp, weedy spots.

Some springs were found near brushy country about a mile and a half from our camp, but not very well situated as regards safe approach by birds, which would have to pass through some yards of open before reaching the water. A few birds came there, among them two or three fox sparrows, but the place was very difficult to watch properly and so few visitors appeared that it was on two mornings only that any attempt was made by us to do any work there, and then with very little success.

The deep, wooded, and brushy cañon of South Honcut Creek, a few hundred yards west of Rackerby, appeared to be a good place for certain kinds of brush-loving birds, but an examination of this locality proved that it was almost devoid of bird life. Possibly it was too cold and dark at this time of year, although it seemed to be an ideal place for song and fox sparrows.

Along a narrow ridge on the east side of this cañon, and just southwest of Rackerby postoffice, there were some good patches of heavy brush, consisting largely of wild lilac bushes, and, toward the end of our stay at this place, we found fox sparrows there. The creek cañon (with proper cover well up near the top along both sides) runs north and south along here and should be a good line of migration for this genus, but although we found some of these birds in the brush on the east side of the cañon, as just stated, we did not find a single one on or near the top of the ridge on the west side,

notwithstanding the fact that there was equally good cover there.

The fox sparrows found on the east-side ridge were extremely shy and difficult to secure in the heavy brush, and were not at all abundant. This condition of affairs was very much the opposite of my experience near the coast in southwestern Humboldt County (California) in the previous fall (Condor, XXIV, 1922, pp. 48-53), when these birds were found to be very numerous and tame.

The weather had been very dry and warm, actually quite hot in the afternoons, 100 degrees in the shade some days, up to October 1, when a change took place, resulting in wind, rain, and thunderstorms for the next three days.

We had been finding an occasional fox sparrow here and there from day to day, but, with the exception of the first day at the spring which the miners spoiled for us on September 23, when several individuals had been noted, it was not until October 2 that we saw any number of this species. On that date, in the afternoon after a stormy night and morning, we saw several individuals on the ridge east of South Honcut Creek. Heavy wind and rain occurred on October 3, but after the wind had died down a little an attempt was made to find some fox sparrows between showers, with no success. The weather cleared off in the night and on October 4 we found a few of these birds on this ridge, securing five altogether and losing several others. October 5 was fine, but there were not so many fox sparrows about as on the previous day, although several were seen and five more secured.

As the next day was the one set for the ending of this field work, observations on the fox sparrows were brought to a rather premature close, but enough specimens had been obtained to give a good idea of the status of the subspecies migrating along this interior route.

For the region we were working in there is little or nothing on record, but, as some winter specimens of the Slate-colored Fox Sparrow (*Passerella iliaca schistacea*) have been recorded from Sierra City (*vide* Swarth, Univ. Calif. Publ., Zool., Vol. 21, No. 4, 1920, p. 201) it was expected that this form would be taken along these foothills among the fall migrants. This

turned out to be the case, but the proportion of this form to that of the others taken was much greater than had been anticipated. Concerning what other races might be found here one would hardly have been able to make a guess, except that the Yosemite Fox Sparrow (*Passerella iliaca mariposæ*), which breeds in the Sierras at 4000 feet (north of the Sacramento Valley) and upward, would be the form most likely to be found. Of the 23 fox sparrows we secured at Rackerby, there were 13 Slate-colored, six Yosemite, three Yakutat (*P. i. annectens*), and one Valdez Fox Sparrow (*P. i. sinuosa*). Of these, the members of the Schistacea group,—that is to say, the Slate-colored and Yosemite fox sparrows, with gray coloration predominating and reds at a minimum,—were found from September 22 on to the date of the ending of our work; but the members of the Unalascensis group, with red coloration predominating,—namely, the Yakutat and Valdez fox sparrows,—appear to have come to the scene more toward the end of our stay, as none was secured before October 2.

During the course of his painstaking and comprehensive work of revising the genus *Passerella* (Univ. Calif. Publ., Zool., Vol. 21, No. 4, 1920), which resulted in the publication of his valuable addition to our limited knowledge of the life histories of our western representatives of this genus, Mr. H. S. Swarth gathered together for examination about 1800 specimens of this genus from the Pacific coast. Of these, over 700 were in the collection of the Museum of Vertebrate Zoology, University of California, while the remainder were carefully selected according to date of taking, locality, etc., from the available collections of museums and private collectors, thus assembling a greater amount of material for working upon than any student of the genus had ever before had access to. In spite of this large aggregation of material, however, the region along the foothills on either side of the Sacramento Valley, especially toward the northern end, is very sparsely represented in the list of localities from which these specimens were secured.

From the eastern side of the Sacramento watershed the Slate-colored Fox Sparrow is recorded in this list only from

Blue Cañon and Cisco, Placer County, and Sierra City, Sierra County, the two first mentioned localities being quite near each other and about 20 miles south of Sierra City. All three are pretty well back in the mountains, and are close enough together and so similarly situated as to be practically in one region. From the western side of this watershed none of this subspecies is noted in the list, but from that region there are two specimens in the Academy collection, which were taken in Lake County since Mr. Swarth's paper was published.

The Yosemite Fox Sparrow breeds all along the Sierras, from central Siskiyou County south through the Yosemite region, but fall and winter records are very scarce, except in southwestern California, where a few winter records have been made. In place of finding this race numerous at Rackerby, as had been anticipated, comparatively few were taken, and they were not at all typical *mariposæ*. In fact, I had to compare them very carefully with the closely allied races before deciding to place them with that subspecies. The six specimens procured at Rackerby stand in a group by themselves when their bill measurements are compared with those of other lots of unquestionable, breeding *mariposæ*, measured by myself, in that the maximum length, width, and depth of bill of this lot of six specimens is but little greater than the minimum respective measurements of these parts in the other, and numerically larger, lots of breeding birds, while the coloration is about the same in all. In my judgment they are intergraded with *megarhyncha*.

In Swarth's list of specimens examined there is only one record of the Yakutat Fox Sparrow (*Passerella iliaca annectens*) from the Sacramento catchment basin, and that is from Tower House, Shasta County, 18 miles northwest of Redding, and there are only two other records given for the whole interior part of the state of California, one from Stockton, San Joaquin County, and one from Hume, Fresno County, although there are numerous records from on or near the coast. Of this race we secured three specimens, as stated above.

On the other hand, we took only one Valdez Fox Sparrow on this trip, although there are many records from both the

coast country and the Sierras, with a few records from the Sacramento Valley proper.

On October 6 this field trip was concluded, and the return to San Francisco begun. Nothing of note was observed on the return trip except that there were swarms of small birds, of very common species, in the less elevated part of the open oak region just before the actual floor of the valley was reached, and in one place near this locality, a few miles north-east of Marysville, there were quite a number of Magpies (*Pica nuttalli nuttalli*).